REMARKS/ARGUMENTS

The Office Action mailed April 4, 2005 has been reviewed and carefully considered.

Claims 1-4, 7, 10-13, 15-21, 24, and 27-30 have been amended. Claims 1-30 are pending.

The Examiner's statement regarding his review of the Information Disclosure Statements is acknowledged.

Claims 2, 3, 11-13, 15, 16, 19, 20, and 28-30 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 1-4, 10-13, 15, 18-21, and 27-29 have been amended so that the identified recitations of "said parameter value" or "said parameter" therein now recite "said retrieved communication parameter value". Moreover, Claims 16, 17, and 30 have been amended so that the identified recitations of "said transmission power level value" or "said transmission power level" therein now recite "said retrieved transmission power level value". Accordingly, all of Claims 1-30 are believed to satisfy 35 U.S.C. §112, second paragraph. Reconsideration of the rejection is respectfully requested.

Claims 1-3, 5-20, and 22-30 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,453,472 to Leano et al. (hereinafter "Leano"). Claims 4 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Leano in view of U.S. Patent No. 6,588,016 to Chen (hereinafter "Chen").

It is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of independent Claims 1 and 13:

> In a **modem** device for bi-directionally communicating with a remote site, a method for providing warning of impaired communication, comprising the steps of:
>
> retrieving a communication parameter value from memory;

comparing said retrieved communication parameter value with a predetermined threshold to identify an excessive communication parameter value indicative of a potential communication link impairment....

Moreover, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of independent Claim 16:

In a **modem** device for bi-directionally communicating with a remote site, a method for providing warning of impaired communication, comprising the steps of:

retrieving a transmission power level value from memory;

comparing said retrieved transmission power level value with a predetermined threshold to identify an excessive transmission power level value indicative of a potential communication link impairment....

Further, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of independent Claim 18:

A **modem** device for providing warning of impaired communication in a system in which said modem device is bi-directionally communicating with a remote site, said modem device comprising:

means for retrieving a communication parameter value from memory;

means for comparing said retrieved communication parameter value with a predetermined threshold to identify an

excessive communication parameter value indicative of a potential communication link impairment....

Additionally, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of independent Claim 30:

A **modem** comprising:
means for retrieving a transmission power level value from memory;
means for comparing said retrieved transmission power level value with a predetermined threshold to identify a transmission power level value indicative of a potential communication link impairment....

As recited in all of the preceding independent claims, the **modem** or **modem device** (hereinafter "modem") is receiving/retrieving a parameter and is then performing a comparison of the parameter with a predetermined threshold.

In contrast, Leano discloses that "the **head end**'s hardware is configured to compare the power level input from the cable modem with an adjusted power level" (Leano, col. 9, lines 32-34). Accordingly, Leano does not disclose a modem for receiving/retrieving a parameter and for performing a comparison of that parameter with a predetermined threshold, as essentially recited in Claims 1, 13, 16, 18, and 30. Rather, Leano discloses that a **head end** receives a power level that is input to the head end unit from a cable modem, and then the **head end** compares the inputted power level to an adjusted power level.

The performing of the comparing step at the modem provides a significantly more efficient approach at determining and correcting a potential communication link impairment originating at the modem than the approach of

Leano. That is, while the invention of Claims 1, 13, 16, 18, and 30 involve a modem and thus are capable of efficiently determining and correcting problems occurring at or involving the modem, the invention of Leano requires the head end to receive a power level input from a cable modem (thereby incurring cost in transmission of the power level from the head end to the cable modem) and to compare the inputted power level with an adjusted power level.

Accordingly, Leano involves a different approach than that employed by the present invention and, thus, does not teach or suggest all of the above-limitations of Claims 1, 13, 16, 18, and 30.

Moreover, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest "initiating substantially periodic transmission of a message **to said remote site** indicating a system adjustment is necessary, in response to said comparison", as recited in independent Claims 1 and 18.

Further, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest "initiating substantially periodic transmission of a message *including said retrieved communication parameter value* **to said remote site** indicating a system adjustment is necessary, in response to said comparison", as recited in independent Claim 13.

Additionally, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest "initiating substantially periodic transmission of a message *including said retrieved transmission power level value* **to said remote site** indicating a system adjustment is necessary, in response to said comparison", as recited in independent Claim 16.

Moreover, it is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest "means for launching a message, said message indicating that a system adjustment is necessary, **to a remote site** should said retrieved transmission power level value be at a

value indicative of a potential communication link impairment", as recited in independent Claim 30.

In contrast, Leano discloses that "[t]he head end then sends a response to the particular cable modem's ranging request indicating that the cable modem must adjust its power level to the adjusted power level. The cable modem then adjusts its power level output accordingly" (Leano, col. 9, lines 44-47). Thus, while all of Claims 1, 13, 16, 18, and 30 essentially recite that a message is sent from the modem to a remote site, Leano discloses sending a ranging request from the head end unit to the modem indicating the modem must adjust its power level.

Further, while the messages recited in Claims 13 and 16 respectively include the retrieved communication parameter value and the retrieved transmission power level value, Leano instead discloses "[a] difference between the values of the adjusted power level and the cable modem's actual power level results in an adjustment to the cable modem's power level that is equal to this power level difference" (Leano, col. 9, lines 35-40). For example, the Examiner has admitted that the difference is communicated from the head end to the cable modem (Office Action, p. 5, paragraph directed at Claim 2). That is, while the actual value used in the comparison is included in the message sent to a remote site as claimed in Claims 13 and 16, Leano discloses sending a difference value (which is not a value that was used in the comparison) from the head end to the modem. Accordingly, this limitation of Claims 13 and 16 is also not disclosed by Leano. It is to be noted that this limitation is also essentially present in dependent Claims 2 and 19.

Accordingly, Leano does not disclose the above-recited limitations of Claims 1, 13, 16, 18, and 30. Moreover, Chen does not cure the deficiencies of Leano and is silent with respect to the above-recited limitations.

A reference cited against a claim under 35 U.S.C. §102 must disclose each and every limitation of the rejected claim.

Accordingly, independent Claims 1, 13, 16, 18, and 30 are patentably distinct and non-obvious over Leano (and Chen) for at least the reasons set forth above.

Claims 2-12 depend from Claim 1 or a claim which itself is dependent from Claim 1 and, thus, includes all the elements of Claim 1. Claims 14-15 depend from Claim 13 and, thus, include all the limitations of Claim 13. Claim 17 depends from Claim 16 and, thus, includes all the limitations of Claim 16. Claims 19-29 depend from Claim 18 or a claim which itself is dependent from Claim 18 and, thus, includes all the elements of Claim 18. Accordingly, Claims 2-12, 14-15, 17, and 19-29 are patentably distinct and non-obvious over the cited reference for at least the reasons set forth above with respect to Claims 1, 13, 16, and 18, respectively.

Moreover, said dependent claims include patentable subject matter in and of themselves and are, thus, patentable distinct and non-obvious over the cited references in their own right. For example, as noted above, none of the cited references, either taken singly or in combination, disclose "wherein said message includes said retrieved communication parameter value" as recited in Claims 2 and 19.

Accordingly, reconsideration of the rejection is respectfully requested.

In view of the foregoing, Applicants respectfully request that the rejection of the claims set forth in the Office Action of April 4, 2005 be withdrawn, that pending claims 1-30 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicants Deposit Account No. 07-0832.

Respectfully submitted,

LARRY CECIL BROWN ET AL.

GHE:pdf

By: 

Guy H. Eriksen
Attorney for Applicants
Registration No.: 41,736
(609) 734-6807

Patent Operations
Thomson Licensing Inc.
P.O. Box 5312
Princeton, NJ 08543-5312

June 16, 2005